

Appln. No. 10/767,655
Amendment
Reply to Office Action dated October 28, 2004

Docket No. 304-821

REMARKS

The foregoing amendments and these remarks are in response to the Office Action dated October 28, 2004. This amendment is filed with a request for a three month extension of time and authorization to charge Deposit Account No. 50-0951 for the appropriate fees.

At the time of the Office Action, claims 1-14 were pending in the application. In the Office Action, claim 7 was rejected under 35 U.S.C. §112, first paragraph. Claim 6 is rejected under 35 U.S.C. §112, second paragraph. Claims 1-14 were rejected under 35 U.S.C. §103(a). The rejections are discussed in more detail below.

I. Rejections under 35 U.S.C. §112, first and second paragraph

Claim 7 was rejected under 35 U.S.C. §112, first paragraph, because the specification, while being enabling for providing a maximum power of 2200 watts in the combined areas of area 17 and area 19, was asserted to fail to reasonably provide enablement for the maximum power output of 2500 watts. To the contrary, in paragraph [012] of the specification it is explicitly stated that the maximum power for the first area can be 2500 Watt. It is true that in the description in paragraph [032] the first area comprising first heating area 17 and first heating area 19 has 2200 Watt altogether, but a person having ordinary skill in the art can take from paragraph [012] that the power may also be 2500 Watt for the first area. Withdrawal of the rejection is thus respectfully requested.

Claim 6 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 6, it was asserted to be unclear what would constitute a "standard basic power", and also unclear what the power output is for such standard basic power that would be distinguished from the maximum power in the first area. Claim 6 is cancelled herein, and withdrawal of the rejection is respectfully requested.

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II. Rejections to the claims based upon Art

Claims 1-5, 9, 10, 13 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,350,875 to McWilliams ("McWilliams"). Claims 6-8, 11 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over McWilliams as applied to claims 1-5, 9, 10, 13 and 14, and further in view of U.S. Patent No. 6,081,149 to Higgins ("Higgins").

New claim 15 is introduced herein, which is a combination of previous claim 1 with additional subject matter as follows.

Claim 15 recites "wherein an electrical connection of said first area is monitored by said first excess temperature protection, wherein said first area has connecting plugs being connected to said first excess temperature protection for disconnecting said first area in the case of occurrence of an excess temperature at said first area". This has been disclosed in the original application in paragraph [025]. It has to be regarded, that in the description, first area 17 and second heating area 19 correspond to the first area according to the claims, see paragraph [030].

The claim also recites "an electrical connection of said second area is directly connected to a power supply without interposing said first excess temperature protection for operating completely without monitoring by excess temperature protection". This has been disclosed in former claim 2 and paragraphs [009] and [026].

New claim 16 includes the feature "wherein said second area forms an outermost heating area". This feature has originally been disclosed in paragraphs [011] and [022] as well as claims 3 and 4 and Fig. 1.

In the heating device defined in independent claim 15, a first area can be heated and, while heating, is monitored and can be disconnected by a first excess temperature protection. A second area has a rather low maximum surface heating power and is not monitored by an excess temperature protection. This means that the operating state of the second area does not depend on an excess temperature protection, but only on the power supply. With this heating device, it is possible that in an operating state with the first and the second heating area, the first heating area is disconnected from the power supply by the excess temperature protection. So the first heating area does not operate. The second heating area will still operate as it has not been disconnected from

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the power supply. The rather low maximum surface heating power of approximately 2.5 Watt/cm^2 does not need any monitoring or excess temperature protection. Thus, even when according to excess temperature the first heating area has been switched off, the heating procedure in the second area can still continue.

Turning now to the rejection over McWilliams, applicant notes that the electrical connections of McWilliams being disclosed in figure 1 shows three switching states. In the first switching state, which is shown in figure 1 with the switch in the right position, this means that none of the heating area is connected. In the second and middle switching states, there is a series circuit including terminal connector 20 and with this terminal connector 20 the outer heating area and then also via the terminal connector 18 the central heating area. Thus, both heating areas are connected in series in this middle switching state. Mechanical switch 22 is also in this series circuit. If according to high temperature over the central heating area the mechanical switch 22 is opened, the central heating area as well as the outer heating area are both disconnected from the power supply.

In the third switching state when the switch is in the left position, only the central heating area is connected via the terminal connector 18 and mechanical switch 22 to the power supply.

In McWilliams, whenever the outer heating area is connected to the power supply in the middle switching position, both heating areas and as such also the outer heating area can be switched off by the mechanical switch 22. McWilliams wants to assure that an excess temperature protection is always available and can never be avoided or deactivated.

Consequently, McWilliams does not teach or suggest to a person having ordinary skill in the art the heating device according to new independent claim 15, in which the operating state of the second area does not depend on an excess temperature protection, but only on the power supply.

Higgins discloses in figures 1 and 2 as well as in column 3, line 66 to column 4, line 29, three different heating states. In the first heating state, terminals A and F are connected to a voltage supply and so only heating element 9, which can be seen as one of the central heating areas, is energized via the thermal limiter 13, which corresponds to the excess temperature

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protection according to the invention. Thus, in this first heating state, it is clear that there is a monitoring of the operation, as the thermal limiter 13 is included in the circuit.

In the second heating state, heating element 10, which can also be regarded as a first heating area according to the invention, is energized also by a parallel connection with the voltage supply at the terminals A on the hand and I and F on the other hand. Also in the second heating state, the thermal limiter 13 is included in the circuit.

In the third heating state, the voltage supply is connected to terminals A and D. Terminal I is connected to terminal F and terminal B is connected to terminal C, see column 5, lines 25 to 29. This discloses clearly that the inner heating area comprising the heating elements 9 and 10 is connected in parallel with each other and in series with the heating element 11 of the outer heating area. Heating element 12 from the outer heating area again is connected in parallel to the other heating elements. As even heating element 12 or terminal C is connected to terminal B, it is clear that also in the third heating state the thermal limiter 13 is in operation as it is included in the circuit. If according to excess temperature the thermal limiter will open its contact, all the heating elements and as such all the heating areas are disconnected.

It can therefore be seen that, similar to McWilliams, Higgins also discloses that there is always a monitoring of all the heating areas by an excess temperature protection in the circuit. Higgins does not teach or suggest the heating device defined in the present claims, which result in the provision of a second heating area, which will not be disconnected in a case of excess temperature as the excess temperature limiter is not connected in the series circuit with this second heating area.

For the foregoing reasons, claim 15 is believed to include patentable subject matter, and to be in condition for allowance. The dependent claims are also allowable because of their dependence upon an allowable base claim, and because of the further features recited.

III. Conclusion

Applicants have made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicants

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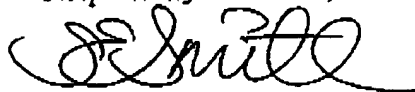
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invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicants respectfully request reconsideration and prompt allowance of the pending claims.

Date:

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Respectfully submitted,



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